Contents of Animal Feed Science and Technology, Volume 32

Vol. 32 Nos. 1-3

January 1991

Special Issue: OECD Workshop Nantes

Preface	ix
New methods for the structural and compositional analysis of cell walls for quality determinations	
F.E. Barton II (Athens, GA, U.S.A.)	1
The content of neutral and acid detergent fibre in forages predicted by near infrared reflectance analysis	
N.P. Kjos (Ås-NLH, Norway)	13
Pyrolysis mass spectrometry of coastal Bermudagrass (Cynodon dactylon (L.) Pers.) and	
'Kentucky-31' tall fescue (Festuca arundinacea Schreb.) cell walls and their residues after ozonolysis and base hydrolysis	
W.H. Morrison III (Athens, GA, U.S.A.), M.A. Scheijen and J.J. Boon (Amsterdam,	
The Netherlands)	17
Electron microscopy as a method for investigating cell wall degradation in the rumen	
E. Grenet (Ceyrat, France)	27
Chemical analysis of lignocellulose materials	
O. Theander (Uppsala, Sweden)	35
The influence of the Maillard reaction upon the nutritive value of fibrous feeds	
P.J. van Soest (Ithaca, NY, U.S.A.) and V.C. Mason (Maidenhead, Gt. Britain)	45
Chemical analysis of cell wall and energy digestibility in growing pigs	
I.J. Vervaeke, N.A. Dierick, D.I. Demeyer, J.A. Decuypere (Melle, Belgium) and H.	
Graham (Uppsala, Sweden)	55
Relationship of lignin and esterified phenolics to fermentation of smooth bromegrass fibre	
H.G. Jung (St. Paul, MN, U.S.A.) and M.D. Casler (Madison, WI, U.S.A.)	63
Comparison between enzymatically and chemically extracted pectins from apple cell walls	
C.M.G.C. Renard, A.G.J. Voragen, W. Pilnik (Wageningen, The Netherlands) and J.F.	
Thibault (Nantes, France)	69
Mechanisms of cellulose degradation by fungi and bacteria	
M.P. Coughlan (Galway, Ireland)	77
Comparative aspects of plant cell wall digestion in insects	
R.A. Prins and D.A. Kreulen (Haren, The Netherlands)	01
Digestibility by rumen microorganisms of neutral sugars in perennial forage stems and leaves	
D.R. Buxton (Ames, IA, U.S.A.)	19
The genetic manipulation of rumen bacteria with special reference to fibre digestion	
H.J. Flint and A.M. Thomson (Aberdeen, Gt. Britain)1	23
Cellulose degradation by two rumen anaerobic fungi in monoculture or in coculture with rumen bacteria	
A. Bernalier, G. Fonty and Ph. Gouet (Cevrat, France)	31

Influence of oxygen and carbon dioxide on cell wall degradation by white-rot fungi F. Zadražil (Braunschweig, F.R.G.), G.C. Galletti, R. Piccaglia, G. Chiavari and O.
Francioso (Bologna, Italy)
Nutritional aspects of dietary fibres
H. Graham and P. Åman (Uppsala, Sweden)143
Plant cell walls as fibrous lignocellulosic composites: relations with lignin structure and
function
B. Monties (Thiverval-Grignon, France)
Volatile fatty acid production from lupin meal in the caecum of the rat: the role of cell wall polysaccharides and α -galactosides
M. Champ, S. Berot, F. Kozlowski, G. Lecannu and J. Delort-Laval (Nantes, France)
M.M. Mulder, J.A. Lomax (Amsterdam, The Netherlands), P.M. Hotten, E. Cowie and A. Chesson (Aberdeen, Gt. Britain)
Lignin-carbohydrate complexes in graminaceous cell walls in relation to digestibility
G.W. Wallace, A. Chesson (Aberdeen, Gt. Britain), J.A. Lomax (Amsterdam, The
Netherlands) and M.C. Jarvis (Glasgow, Gt. Britain)
Ruminal and intestinal degradation of cell wall constituents of barley, barley fibre and wheat mill run measured by the nylon bag technique
I. Aronen, A. Vanhatalo (Jokioinen, Finland) and T. Varvikko (Addis Ababa, Ethiopia) 201 Digestion of plant cell walls from four different sources in growing pigs
E. Chabeauti, J. Noblet (L'Hermitage, France) and B. Carré (Monnaie, France)
Fibre digestion and rate of passage in the rabbit: effect of particle size and level of lucerne meal
T. Gidenne, M. Segura, A. Lapanouse (Tolosan, France), B. Carré and J. Gomez
(Monnaie, France)
Diet influence on biological degradation in sacco of cell walls by ruminants
S. Giger-Reverdin, D. Sauvant, T. Najar and M. Rigault (Paris, France)
Effects of dietary date pulp on digestion in the rat
M. Focant, M. Meurens, S. Koshroff and M. Vanbelle (Louvain-la-Neuve, Belgium)
hydrolysis of poplar cell wall components
B. Toussaint, G. Excoffier and M.R. Vignon (Grenoble, France)
Vol. 32 No. 4 February 1991
Comparison of laboratory methods on precision and accuracy of predicting forage organic
matter digestibility
R.P. Mbwile and P. Udén (Uppsala, Sweden)
Distribution of condensed tannins (proanthocyanidins) in various fibre fractions in young and mature leaves of some oak species
H.P.S. Makkar and B. Singh (Kangra Valley, India)
Effects of additions of sodium bicarbonate, salt, Aspergillus oryzae culture extract, niacin,
lysine or phenylalanine to ground corn-based supplements on feed intake and digestion by Holstein steers consuming bermudagrass (Cynodon dactylon) hay
D.L. Galloway, Sr., A.L. Goetsch, W. Sun and L.A. Forster, Jr. (Fayetteville, AR, U.S.A.) 261
Effect of nonstructural to structural carbohydrate ratio on rate and extent of nutrient utilization in situ
G.A. Varga and T.J. Whitsel (University Park, PA, U.S.A.)
Comparison of effective degradability with dry matter degradability measured at mean rumen retention time for several forages and forage: concentrate diets
P.S. Mir, Z. Mir (Kamloops, B.C., Canada) and J.W. Hall (Vancouver, B.C., Canada) 287

Effect of concanavalin A from jackbean seeds on short-term food intake regulation in chicks and laying hens	
A.M. Leon, M.L. Picard (Maracay, Venezuela), JP. Caffin and M. Plassart	
Nouzilly, France)	297
Ensiling whole wheat for ruminant feeding at different stages of maturity	
Z.G. Weinberg, G. Ashbell, Y. Hen and Z. Harduf (Bet Dagan, Israel)	313
Additivity of the apparent and true ileal digestible amino acid supply in barley, maize, wheat or soya-bean meal based diets for growing pigs	
S. Furuya and Y. Kaji (Kumamoto, Japan)	321
Intake and digestion of urea-treated, urea-supplemented and untreated rice straw by goats A.A. Tuen, M.M. Dahan (Selangor, Malaysia), B.A. Young (Edmonton, Alta., Canada) and P. Vijchulata (Bangkok, Thailand)	333
and F. Vijenulata (Bangkok, Thanand)	333
Author Index	341